

# **How to Portray Men and Women in Advertisements?**

## **Explicit and Implicit Evaluations of Ads Depicting Different Gender Roles**

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ABSTRACT

The purpose of the current study was to gain more insight in the evaluation of advertisements containing different gender role portrayals (stereotypical/a-stereotypical) by examining explicit and implicit processes of ad evaluation. The results of two experiments showed an explicit preference for ads containing a-stereotypical images. Implicitly, we found a preference for ‘warm’ ads irrespective of the degree of gender stereotypicality of the ad. These findings suggest that complex stimuli such as ads may inhibit implicit gender stereotype activation. At an implicit level, warmth seems a better predictor of ad evaluation.

Keywords: implicit attitudes, ad evaluation, gender role portrayal, implicit stereotyping, Implicit Association Test

## 1. Introduction

In most Western societies, public opinion reflects the growing belief in gender equality. Decades after the onset of the feminist movement, women increasingly participate in the workplace and occupy almost as diverse jobs as men do. Although to a lesser extent than women, men too have changed their behavior. Men do more household chores and spend more time with the children. Thus, gender-related responsibilities and expectations that once were distinct have become mixed and blurred (Hupfer, 2002). The question is what these huge societal changes possibly imply for advertisers. Do consumers expect ads to represent these changing gender roles? Or, do they take stereotypical roles in ads for granted and can advertisers continue using them to communicate to an intended target group?

Ad strategies frequently switch from traditional to modern and back. For instance, during the eighties, advertisers have put forward ads that showed men “fussing over what dinner they should prepare for their dates”, while Marketing News of the nineties headlined: “Forget the sensitive men!” and reported that marketers have decided that the “manly man” and ads “oozing testosterone” were back (Miller, 1993). Also with respect to female role portrayals, opinions have been divided and variable. While some marketers have ditched the old gender stereotype and won’t risk offending their female customers, others subscribe that magazine covers like Cosmopolitan should be close to porn. Further, we are still seeing advertisements that continue to primarily target women as the cleaners and the caretakers (Martin, 2001). Finally, practitioner journals reiterate the need to better understand male and female attitudes in order to develop effective advertisements that “translate” across gender lines (Dortch, 1994). This suggests that practitioners are still puzzling on how to portray gender roles in ads.

Academic knowledge also fails to provide satisfactory answers. The results of different studies on the evaluation of gender role portrayals in advertising are not only inconsistent and contradictory (Orth & Holancova, 2004; Whipple & Courtney, 1985), but they are also restricted to standard copytesting using self-reports (Hazlett & Hazlett, 1999). Self-reports have been shown to be less appropriate to capture automatic and spontaneous processes in consumer evaluations and decisions (e.g. Brunel, Tietje, & Greenwald, 2004). The recently acknowledged role of emotional and spontaneous responses in ad evaluation suggests that contemporary copy testing

unravels people's ad evaluation only partly (Cramphorn, 2004). The purpose of the current study was to gain more insight in the evaluation of gender role portrayals (stereotypical versus a-stereotypical) in print advertisements. We thereby addressed both deliberative (explicit) and spontaneous (implicit) processes of ad evaluation by using a measure of implicit attitudes (the Implicit Association Test, IAT) next to self-report measures. Moreover, this research goes beyond previous studies by taking into account both sexes, both as portrayals in ads (Orth & Holancova, 2004) and as respondents.

## **2. Gender stereotypes in advertising or not: the ongoing debate**

For a long time advertisers have been using gender stereotypes in advertising because it was generally assumed that gender roles could explain sex differences in ad evaluation. They presumed that the male agentic role is characterized by concern for the self, while the communal female role typically embraces concern for both the self and others (Meyers-Levy, 1988). The advertising strategy implications of this distinction were that marketers should make use of longstanding stereotypes that attribute independence to men and affiliation to women. Accordingly, recent research concluded that men and women are likely to respond more favorably to messages that are in tune with their respective gender-role expectations and information processing styles, in spite of recent social-cultural trends (Putrevu, 2004). Orth and Holancova (2004) reported that females had less favorable attitudes towards ads featuring female models in roles superior to males than towards ads with male models in superior roles to females and towards single sex ads. These findings suggest that the use of stereotypes in ads is consistent with general preferences.

However, different researchers have questioned the usage of gender stereotypes in ads. Back in 1979, Scheibe believed that the usage of a-stereotypical images could broaden existing markets without destroying old ones. She demonstrated that people were much more likely to remember commercials that showed new roles for men and women than those that perpetrated stereotypes. Further, Whipple and Courtney (1985) and later Latour (1993) found that for a female audience, modern, liberated female role depictions might be more effective than traditional role portrayals. Hupfer (2002) concluded that practitioners are in danger of alienating the working female audience when constructing advertising messages

containing gender stereotypes. She believes that with changing gender roles the relationship among sex and agentic or communal traits is unsettled.

In summary, the empirical and practical arguments in favor of using stereotypes in ads are mixed. Further, the debate seems to have neglected portrayal of men in ads. This paper attempts to add information to this debate in two important ways. Investigating how men and women react to ads depicting men and women in stereotypical versus modern roles is our first contribution. Going beyond standard copy testing, which typically relies on self-reports, is our second contribution. We now argue why considering implicit ad evaluation measures is important for the marketing field.

### **3. Beyond standard copy testing**

Because standard copy testing is mainly based on self-report measures (Hazlett & Hazlett, 1999), the studies discussed in the previous section fail to meet recent sighs to take into account automatic and implicit processes next to the more deliberative forces when examining consumer attitudes and decisions (Shiv & Fedorikhin, 1999; Brunel, Tietje, & Greenwald, 2004; Maison, Greenwald, & Bruin, 2004; Cramphorn, 2004). Several arguments can be formulated to enrich advertising research with implicit measures.

A first argument is that self-reports are susceptible to social demand influences. In self-report tasks people do not always tell what they really feel in order to impress the researcher or to hide personally or socially undesirable opinions (e.g. Fisher & Katz, 2000). This may be especially true for the evaluation of controversial ads such as ads containing gender role portrayals. A second argument is that self-reports provide only part of the total ad evaluation. Because emotions typically precede cognition (LeDoux, 1989), people have to think back on how they felt about the ad when filling in a questionnaire. The lag between the experience and the report allows other information than the primary affective reaction to influence the self-report. Consequently, these evaluations and opinions are often ‘artificial’ and do not reflect the real spontaneous evaluation (Kardes et al., 1993). In addition, social cognition researchers have recently documented that unconscious processes are intrinsically involved with all people’s emotional responses. A large portion of consumers’ daily activity seems to result from processes that occur outside conscious

awareness and control (Greenwald et al., 2002; Bargh, 2002). Several researchers concluded that most processing of product attributes and advertising messages is subconscious, implicit and intuitive (Olshavsky & Granbois, 1979; Hoyer, 1984; Haley & Baldinger, 1991). Also, consumers are unaware of how ideas from an advertisement affect their feelings towards a brand (Heath, 2001; 2002).

The recognition of the important role of automatic processes in (consumer) behavior, is related to the recent distinction in social cognition research between explicit and implicit attitudes. Explicit attitudes are conscious attitudes that are measured by self-report tasks; implicit attitudes are “introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action towards social objects” (Greenwald & Banaji, 1995) and are assessed by means of implicit measures that are often based on the interpretation of reaction times (Greenwald, McGhee, & Schwarz, 1998).

### *3.1. Implicit measures*

One of the most promising solutions to the shortcomings of self-report measures is the Implicit Association Test (IAT). The IAT is a computerized task that measures strengths of associations between concepts by comparing response times. The respondents’ task is to categorize stimuli that represent four concepts by pressing just two computer keys, which each combine two out of the four concepts, as fast and accurately as possible. The basic assumption of the IAT is that respondents should have faster reactions when mapping two similar or associated concepts to the same response key than when these associated concepts require different responses. The difference in reaction times between these two tasks is taken as an indication of the degree of association between concepts (Greenwald, McGhee, & Schwartz, 1998). For instance, Brunel et al. (2004) assessed implicit attitudes towards ads containing Black models versus White models by combining the two types of ads with a discrimination task between words with positive versus negative meaning. Individuals with implicit prejudice against black models in ads were assumed to react slower when ads with Black models and positive words shared the same response key as compared to the reversed configuration (Ad with Black model and negative words). A substantial number of studies have demonstrated the reliability and validity of the IAT (overview in Greenwald & Nosek, 2001).

#### **4. Implicit stereotypes**

Closely related to the implicit attitude concept are implicit stereotypes. As a ‘special case’ of implicit attitudes, implicit stereotypes are defined as “the introspectively unidentified (or inaccurately identified) traces of past experience that mediate attributions of qualities to members of a social category” (Greenwald & Banaji, 1995). Applied to gender stereotyping, it is suggested that all people will implicitly stereotype genders (e.g. Devine, 1989). Furthermore, Banaji and Greenwald (1995) found that implicit gender stereotypes are very similar for men and women. This result is contrary to earlier findings based on self-report that suggest more egalitarian gender beliefs and reduced sex-stereotyping among women than men (e.g. Ashmore, Del Boca, & Bilder, 1995; Glick & Fiske, 1995). Banaji and Greenwald’s (1995) “judgment of fame” study showed that both sexes assigned fame more to male than to female names (Banaji & Greenwald, 1995). These results were later confirmed and extended (e.g. Rudman & Kilianski, 2000; Rudman, Greenwald, & McGhee, 2001; Rudman & Glick, 2001; Rudman & Goodwin, 2004): men and women alike implicitly associate men more with agency related traits and women with communal related traits, despite differences in explicit attitudes. This implies that implicit gender beliefs and attitudes are less likely to show differences based on participant’s sex or conscious beliefs, compared to self-report counterparts (Rudman et al., 2001). Further, it is suggested that implicit and explicit stereotypes may operate independently from each other. Like implicit attitude measurement, implicit stereotypes are assessed using implicit measures. Several researchers have recently successfully broadened the use of the IAT by extending the attitude-object category (e.g. self, gender, etc.) and using nonevaluative attributes (e.g. strong, large, etc.), making it suitable to measure stereotypes (Rudman, Greenwald, & McGhee, 1996; Rudman & Kilianski, 2000; Rudman et al., 2001).

At first sight, the existence of implicit gender stereotyping might be considered as further support for the usage of stereotypes in ads. However, different authors have shown that automatic gender stereotyping is not ubiquitous but conditional. Gilbert and Hixon (1991) showed a moderating effect of cognitive busyness on automatic gender stereotyping. They found that when exposed to an Asian target, non-busy respondents showed spontaneous stereotype activation

whereas busy respondents did not. But when respondents had to rate an Asian target on stereotypical traits, which stimulated stereotype activation, the pattern reversed. Busy respondents were more likely to apply these activated stereotypes than were non-busy respondents. Apparently, when cognitively loaded, stereotype activation occurs only when the category is salient and relevant enough for the goal at stake. Further, different studies indicated that automatic beliefs and attitudes can be modified by changing the social context that people inhabit (e.g. Dasgupta & Greenwald, 2001; Wittenbrink, Judd, & Park, 2001). With respect to gender stereotyping, Dasgupta and Asgari (2004) found that exposure to female leaders temporarily reduced women's automatic gender stereotypical beliefs. Finally, Moskowitz, Salomon, and Taylor (2000) demonstrated a positive effect of the level of explicit stereotype endorsement on automatic stereotype activation. The underlying idea is that the prejudice level as measured through questionnaires, is directly related to the associative strength between the category node and the stereotypic content in the individuals' mind. Individuals who display higher levels of prejudice should also have stronger associative links, so that the activation from the category node to the stereotypic traits should spread more easily. The generality of automatic gender stereotyping may be further questioned as current knowledge on its activation and operation is limited to reactions to language-based stimuli (Rudman et al., 2001) and schematic drawings (Rudman & Kilianski, 2000). Whether or not gender stereotyping would spontaneously occur when consumers perceive ads depicting men or women is therefore an open and important question.

## **5. Summary of the research objectives and hypotheses**

This paper has two purposes. The first and most important purpose of the study was to examine whether IAT might provide information beyond the information available from self-reports. We expect that explicit evaluation of gender role portrayals in advertising may be different from spontaneous evaluation due to the influence of social norms or the inability of people to access and report the information that guides automatic evaluation of ads. This also raises the question whether implicit gender stereotyping will be activated in consumers who are confronted with complex stimuli such as ads depicting different gender roles. The second aim was to gain more insight in the evaluation of gender role portrayals



(stereotypical versus a-stereotypical) in print advertisements. In doing so, both sexes, both as portrayals in ads and as respondents were taken into account.

### *5.1. Hypotheses*

Although substantial research suggests that automatic gender stereotyping is quite omnipresent (e.g. Rudman & Kilianski, 2000; Rudman et al., 2001), different authors have set boundaries to the generality of the phenomenon (Gilbert & Hixon, 1991; Dasgupta & Asgari, 2004; Moskowitz et al. 2000). Further, self-reports measuring attitudes toward social sensitive topics are likely to be influenced by social norms (Fisher & Katz, 2000). As a result, we hypothesized that if implicit gender stereotyping indeed applies to ad evaluation we should find that:

H1: Dissociation emerges between explicit and implicit attitudes towards ads portraying gender roles, with respondents showing explicitly relatively more progressive and implicitly relatively more stereotype-consistent ad evaluations.

Following the evidence that women show more egalitarian explicit gender attitudes than men (Glick & Fiske, 1995) but that genders do not differ implicitly (Banaji & Greenwald, 1995), we hypothesized that:

H2: The dissociation between implicit and explicit measures (H1) is larger for women than for men.

## **6. Experiment 1**

In the first experiment we examined explicit and implicit attitudes towards ads depicting women in stereotypical and a-stereotypical roles in advertisements for both men and women. Further, the relationship between the ad attitudes and implicit gender role beliefs was examined.

### *6.1. Participants and procedure*

Seventy-four undergraduate students (31 women, 43 men) voluntary participated in the experiment. All respondents were between 18 and 24 years old

( $M_{\text{age}}=20.73$ ,  $SD=2.15$ ). Upon arrival in the lab, respondents first completed a questionnaire followed by two 5-block computer-based IATs<sup>2</sup>. The questionnaire contained measures of ad attitudes and demographic questions. The order of the different ads was counterbalanced so that half of the respondents first had to rate the stereotypical ads followed by the a-stereotypical ads. The other half of the respondents received inversed instructions. Respondents were randomly assigned to one of the orders. Next, respondents first completed the IAT that measured implicit attitudes towards the ad and subsequently the IAT designed to measure implicit gender stereotypes. The experiment was conducted individually and took about 15 minutes.

## *6.2. Stimuli*

We developed 4 ads with a simple layout that allowed quick processing and classification. Each of the four ads consisted of the (same) fictitious brand identifier for a mobile phone company (brand name, image of a mobile phone, slogan) and a picture of (the same) woman in different (stereotypical or a-stereotypical) roles. Two ads portrayed a sensual woman and two ads a career woman. This selection relied on a study showing that sensual women (stereotypical) and career women (a-stereotypical) were most prevalent and on the rise in print advertisements from 1974-1994 (Mortelmans, 1997). To make the pictures resemble an ad, we added a slogan to the pictures. The slogan (“you can only be yourself, my sigma, my personality, me”) was assumed to be neutral and relevant because it fits with both roles and mobile phones are often used to express aspects of one’s personality (Carroll, Howard, Peck, & Murphy, 2002).

## *6.3. Measures*

We used a six item semantic differential (interesting/boring, good/bad, unpleasant/pleasant, dislike/like, favorable/not favorable, not irritating/irritating; Mackenzie & Lutz, 1996; Brunel et al., 2004) to measure the explicit attitudes toward

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<sup>2</sup> We chose to use this fixed order because the IAT is less sensitive than explicit measures to influences of prior measures (Brunel et al., 2004; Nosek, Greenwald, & Banaji, 2003), although we are aware that the order of implicit versus explicit measures has inconsequential effects on the results (Greenwald & Farnham, 2000).

the stereotypical ads on the one hand and the a-stereotypical ads on the other hand. Scale reliability was high (Cronbach's  $\alpha$  (stereotypical ads)=0.89; Cronbach's  $\alpha$  (a-stereotypical ads)=0.81).

A first IAT was designed to measure implicit attitudes towards the four ads in the experiment, further called the Aad IAT. The target stimuli were the stereotypical and a-stereotypical advertisements, with 'ad with a sensual woman' and 'ad with a career woman' as target labels. As attribute stimuli, we used positive (gift, peace, laughter, honest, rainbow, loyal) and negative (death, cancer, hatred, disaster, poison, accident) words (all words were copied from a validated list of positive and negative words in Greenwald et al., 1998). Letter case of the verbal stimuli was varied in order to prevent participants from using a simple visual feature of the words as response cues. Stimuli were presented individually in the center of the computer screen and the respondents' task was to assign each stimulus to one of two categories. The IAT procedure comprised of five blocks. In the first block, respondents discriminated between positive and negative words on 24 trials. Block 2 consisted of a target discrimination task (24 trials) in which respondents had to assign the four ads to the right category: 'ad with a sensual woman' versus 'ad with a career woman'. In Block 3 (24 practice and 48 data collection trials) respondents were asked to categorize items by pressing one of the two keys: ads with a sensual woman and positive words were assigned to one key while ads with a career woman and negative words were assigned to the other key. Block 4 included once again a target discrimination task, but now with a reversal of the side of the screen on which the two category labels appeared (24 trials, the reverse of task 2). Block 5 (24 practice and 48 data collection trials) consisted of the reversed combined categorization task of block three: ads with a sensual women and negative words were assigned to one key and ads with a career woman and positive words to the other key. The order of performing block 3 and 5 was counterbalanced between subjects. Before and during each phase, category labels were displayed on the left and right sides of the screen. Respondents were asked to respond as quickly but also as accurately as possible. Summary feedback was given in the form of mean response latency in seconds and percentage correct following each block. All blocks were respondent-initiated. In case of an incorrect response, a red cross appeared on the screen for 400 ms. The interval between pressing the correct

response key and the presentation of the next stimulus was 150 ms. The IAT-effect was calculated so that positive scores indicate preference for the a-stereotypical ads.

The second IAT was similar to the gender role IAT as used in the Rudman and Kilianski (2000) study to assess respondents' implicit beliefs on gender roles. In the current experiment the IAT, used 28 stimulus words: 7 male names (e.g., Tom, Jan, Bart), 7 female names (e.g. An, Ellen, Sofie), 7 career-meaning words (career, job, salary, office, promotion, finances, and occupation), and 7 domestic meaning words (household, family, marriage, child care, cooking, kitchen, and shopping). Task instructions, test blocks and intertrial interval were similar to the Aad IAT. A positive gender role IAT-effect reflects implicit stereotyping, which means that respondents associate career-meaning words more with male names and domestic-meaning words more with female names. This gender role IAT will be further called the 'career-domestic IAT'.

## 6.4. Results

### 6.4.1 Explicit attitudes

An ANOVA with 'type of advertisement' (stereotypical versus a-stereotypical) as within subjects-variable indicated that explicit attitudes towards the a-stereotypical advertisements ( $M_{\text{a-stereotypical}}=4.94$ ,  $SD=.97$ ) were significantly more positive than explicit attitudes towards the stereotypical advertisement ( $M_{\text{Stereotypical}}=4.39$ ,  $SD=1.30$ ),  $F(1,74)=20.58$ ,  $p<.001$ ). In subsequent analyses we found a significant interaction effect between type of advertisement and gender ( $F(1,72)=4.88$ ,  $p=.03$ ). Although both genders significantly preferred the a-stereotypical ad, women ( $M_{\text{difference women}}^3=0.86$ ;  $t(31)=4.40$ ,  $p<.001$ ) held even more positive attitudes towards the a-stereotypical as compared to the stereotypical ad than men ( $M_{\text{difference men}}=.33$ ;  $t(42)=2.23$ ,  $p=.03$ ).

### 6.4.2. Implicit attitudes

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<sup>3</sup> The explicit difference score (here and in the remainder) is the result of subtracting the explicit attitude towards the stereotypical ad from the explicit attitude towards the a-stereotypical ad. Thus, positive scores indicate preference for the a-stereotypical ad.

Prior to analysis, data of both IAT tasks were treated following the procedure outlined by Greenwald et al. (1998): (1) reaction times shorter than 300 ms and larger than 3000 ms were recoded into 300 ms and 3000 ms respectively, (2) the first two trials of each block were dropped because of their typically longer latencies, as were reaction times and trials with an incorrect response and (3) reaction times were log-transformed prior to averaging. However, for reasons of clarity, response latencies in terms of ms will be reported (see Greenwald et al. 1998). The average error rate of the ad evaluation IAT was 5.01% (0%-25.5%), so no respondents had to be excluded from the analysis.

An ANOVA with ‘IAT task’ (stereotypical ad-positive, stereotypical ad-negative) as within-subjects variable showed a significant preference for the stereotypical ads ( $M_{\text{stereotypical-pos}}=811$  ms,  $SD=187$ ;  $M_{\text{stereotypical-neg}}=850$  ms,  $SD=203$ ,  $F(1, 72)=4.35$ ,  $p=.04$ ). This means that respondents hold more positive implicit attitudes towards the stereotypical ad than towards the a-stereotypical ad. No differences in implicit attitudes were found according to gender ( $F(1, 71)=.093$ ,  $p=.761$ ).

For the analysis of the ‘career-domestic IAT’ only one subject had to be excluded because she had extreme high mean latencies. The average error rate was acceptable (5.62%; 0%-28.3%). The iat-effect was calculated so that positive scores indicated implicit gender stereotyping. The results replicated Rudman and Kilianski’s (2000) findings: male names were associated significantly more with career related words and women with domestic related words ( $M_{\text{difference score}}=90$  ms,  $t(72)=-4.99$ ,  $p<.001$ ).

#### 6.4.2. Relationship between explicit and implicit attitudes

In order to statistically compare the results of implicit and explicit measures, we first standardized both types of attitude scores<sup>4</sup>. Secondly, we reversed the scores of the implicit z-variables so that high scores indicate more positive attitudes than low scores. We analyzed the standardized attitudes scores using an ANOVA with type of advertisement (stereotypical vs a-stereotypical) and measurement method (explicit vs

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<sup>4</sup>For the IAT, z-transformation of each test block (stereotypical-positive and stereotypical-negative) was based on the mean and standard deviation of the reaction times in both blocks; for the explicit measures, z-transformation of each measure (attitude towards ad with stereotypical gender depictions and attitude towards ads with a-stereotypical gender role portrayals) was based on mean and standard deviation of all explicit scores (see Brunel et al., 2004, for a similar approach).

implicit) as within subjects variables. The ANOVA revealed a significant interaction effect of type of advertisement and measurement method ( $F(1, 71)=34.43, p<.001$ ), which indicated the expected dissociation between the explicit and implicit Aad measures. That is, respondents explicitly preferred the a-stereotypical ads, while implicitly, they liked the stereotypical ads more than the stereotypical ads. Further, we found a marginally significant three-way interaction between type of advertisement, measurement method and gender ( $F(1,71)=3.84, p=.054$ ), resulting from the weaker explicit preference for a-stereotypical ads for men (see above) that was not replicated on an implicit level. In sum, the results of Experiment 1 support both H1 and H2. Consistent with previous research on implicit attitudes (e.g. Greenwald et al. 1998) a significant weak positive relationship was found between the explicit and implicit attitude measures ( $r=.27, p=.023$ ).

#### *6.4.4. Relationship between attitude measures and ‘career-domestic IAT’*

We did not find a significant correlation between the ‘career-domestic IAT’ on the one hand and either the Aad IAT ( $r=-.113, p=.34$ ) or the explicit difference score ( $r=.040, p=.74$ ) on the other hand.

### *6.5. Discussion*

The current experiment shows dissociation between explicit and implicit attitudes towards ads that portray women in stereotypical and a-stereotypical gender roles. Explicitly respondents preferred the a-stereotypical ad to the stereotypical ad, while implicitly the reverse pattern was found. Whereas men and women held equal implicit attitudes, explicit preference for the a-stereotypical ad was stronger for women than for men. The explicit preference for the a-stereotypical ad seems to reflect the socio-cultural trend towards more gender equality. Given the social sensitiveness of the ads’ content, the explicit results may also reflect social norms rather than people’s spontaneous attitudes. In striking contrast, scores on the implicit attitude measure indicated an automatic preference for the stereotypical ad, irrespective of gender.

These results seem to imply that implicit gender stereotyping interferes with spontaneous ad evaluation. Our data suggest that ads are evaluated less positively on an implicit level when the woman is pictured in an a-stereotypical way. However, the

lack of correlation between the Aad IAT and the ‘career-domestic IAT’ suggests that other processes than implicit stereotyping may account for the implicit preference for the stereotypical ads. In addition, a second look at our ads suggests another, more basic distinction that might have been used to categorize the four ads into the assigned pairs: warmth (ads with sensual woman) versus potency (ads with career woman). As a result, the positive implicit attitudes towards stereotypical depictions of women may indicate a primary preference for warmth over potency rather than an implicit preference for the stereotypical ads. However, because the feminine stereotype and words related to warmth are entangled (Rudman et al., 2001), the current experiment cannot decide between the two interpretations. Therefore we tried to disentangle warmth from the stereotypical gender role in a second experiment. Note that this alternative explanation does not reduce the relevance of our findings in the debate about the use of stereotyping in ads. Rather, it suggests that the implicit evaluations of stereotypical gender roles might be related to other aspects than its stereotypicality. If warmth versus potency is that important aspect, stereotyping might have opposing effects depending on the sex of the person depicted in the ad. That is, implicitly, stereotypical women and a-stereotypical men should be preferred to the extent that they are warmer than their respective counterparts (i.e. a-stereotypical women and stereotypical men).

## **7. Experiment 2**

In this experiment we measured attitudes towards ads depicting different male roles because for men, warmth and stereotypes are dissociated. Therefore, pictures of men should allow disentangling the explanation in terms of stereotyping versus warmth for the findings of Study 1. If the implicit preference for the stereotypes that we found in the previous experiment is due to implicit stereotyping, we expect an implicit preference for the masculine man. If, however, the implicit preference is due to the warmth of the pictures, then we expect an implicit preference for the a-stereotypical ads in this experiment. In addition to the ‘career-domestic IAT’ (like in Experiment 1), we added a gender stereotype IAT in order to determine to what extent people stereotype men as more potent and women as warmer.

### *7.1. Participants and procedure*

One hundred and seven students (61 women, 46 men) participated in the experiment in exchange for a 6-euro participation fee. All respondents were between 18 and 33 years old ( $M_{\text{age}} = 21.84$ ,  $SD = 2.60$ ). The procedure of Experiment 2 was similar to the one in Experiment 1: Respondents first completed a questionnaire, followed by three IATs in a fixed order.

### *7.2. Stimuli*

Again, we created 4 ads with a simple layout, but now the main character in the ad was a man in a stereotypical or a-stereotypical role. Because men are most often portrayed in professional occupations in ads (Vigorito & Curry, 1998) we chose to portray the same male model in rather female versus rather male occupations for reasons of credibility. We assumed that the ‘sensual man’ as the counterpart of the ‘sensual woman’ would be less appropriate because the sensual man is not common in advertising nor in daily life (Rohlinger, 2002).

According to recent figures of the governmental statistics board, the most typical female occupations are ‘nurse’ and ‘nursery school teacher’, while the most typical male occupations are ‘construction worker’ and ‘mechanic’. Accordingly, we developed 2 a-stereotypical ads (warmth) and 2 stereotypical (potency) ads portraying men in the most common occupations for the two categories. The four ads had the same brand identifier for the same fictitious brand of male deodorant (brand name, image of a bottle of deodorant, slogan) and a picture of the same man in four different occupations. The slogan ‘Degree deo keeps you going on’ was selected as it was neutral and appropriate.

### *7.3. Measures*

Explicit Aad was measured using the same semantic differential scale as in Experiment 1 (Cronbach’s  $\alpha$  (stereotypical ads)=0.84; Cronbach’s  $\alpha$  (a-stereotypical ads)=0.91).

To measure implicit Aad we used a methodology similar to that used in Experiment 1. The target stimuli were the stereotypical and a-stereotypical



advertisements, with ‘ad with a strong man’ and ‘ad with a caring man’ as target labels. As attribute stimuli, we used the same positive and negative words as in Experiment 1. For half of the respondents the first combined categorization task consisted of assigning positive words and ‘ads with strong man’ to one response key and negative words and ‘ads with caring men’ to the other response key. In the second combined categorization task they were instructed to combine the positive words with the ad depicting a strong man and the negative words with the ad depicting a caring man. The other half of the respondents received reversed instructions. The IAT-effect was calculated in a way that positive scores indicated preference for the a-stereotypical ads over the stereotypical ads. Next to the Aad-IAT, respondents completed a ‘career-domestic IAT’ identical to the one in Experiment 1 (a positive IAT-effect indicates that respondents associate men more with career related words and women with domestic related words) and a ‘potency-warmth IAT’ in which male and female names had to be combined with words referring to potency and warmth (cf Rudman, Greenwald, & McGhee 2001, Experiment 4). In other words, the ‘warmth-potency IAT’ was designed to measure implicit gender stereotyping, that is the extent to which people implicitly stereotype men as more potent and women as warmer. Positive scores on the ‘warmth-potency IAT’ suggest implicit gender stereotyping.

## 7.4. Results

### 7.4.1. Explicit attitudes

In line with the first study, respondents had a significantly more positive attitude towards the a-stereotypical ads ( $M_{\text{a-stereotypical}}=4.15$ ,  $SD=1.29$ ) than towards the stereotypical ads ( $M_{\text{stereotypical}}=3.71$ ,  $SD=1.05$ ,  $F(1,102)=10.68$ ,  $p=.001$ ). Further, we again found a significant interaction effect between type of measure ( $Aad_{\text{stereotypical}}$  vs  $Aad_{\text{a-stereotypical}}$ ) and gender ( $F(1,101)=5.28$ ,  $p=.024$ ). Women held significantly more positive attitudes towards the a-stereotypical ads as compared to stereotypical ads ( $M_{\text{difference women}}=.71$ ,  $t(58)=-3.91$ ,  $p<.001$ ), while men showed no preference ( $M_{\text{difference men}}=.10$ ,  $t(45)=-.5$ ,  $p=.62$ ).

### 7.4.2. Implicit attitudes

We excluded four respondents from the analysis because of extremely high response latencies. The average error rate was 3.96% (0%-27.9%) and did not require

further removal of respondents. The ANOVA with ‘IAT task’ (stereotypical ad-positive, stereotypical ad-negative) as within-subjects variable showed a significant preference for the a-stereotypical ads ( $M_{\text{a-stereotypical-pos}}=682$  ms,  $SD=129$ ;  $M_{\text{stereotypical-neg}}=790$  ms,  $SD=171$ ,  $F(1,105)=66.88$ ,  $p<.001$ ), suggesting that respondents hold more positive implicit attitudes towards the a-stereotypical ads than towards the stereotypical ads. These findings are inconsistent with implicit stereotyping but consistent with implicit evaluation in terms of warmth and potency. We did not find an interaction effect with gender ( $M_{\text{diff\_men}}=93\text{ms}$ ,  $M_{\text{diff\_women}}=124\text{ms}$ ,  $F(1,104)=1.86$ ,  $p=.175$ ).

For the remaining two IATs no respondents had to be excluded from the analysis as the maximum mean error rate over the two measures did not exceed 7.58%. The ‘career-domestic IAT’ replicated the results of experiment 1. The IAT effect indicated a stronger association between male names and career related words and between female names and domestic related words than in the reversed combination ( $M_{\text{difference}}=100$  ms,  $t(105)=-11.15$ ,  $p<.001$ ). The ‘potency-warmth IAT’ demonstrated evidence for implicit stereotyping in both genders, with the strongest associations between men and words referring to potency and between women and words referring to warmth ( $M_{\text{difference}}=118$  ms,  $t(103)=-11.06$ ,  $p<.001$ ). The latter results are in line with Rudman et al’s. (2001) findings in their experiment 4. In sum, the latter results suggest evidence of implicit stereotyping.

#### *7.4.3. Relationship between explicit and implicit attitudes.*

Similar to Experiment 1 we used standardized attitude scores in an ANOVA with type of advertisement (stereotypical vs a-stereotypical) and measurement method (explicit vs implicit) as within subjects variables and gender as between-subjects variable. Most importantly, the ANOVA revealed a significant main effect of type of advertisement ( $F(1,101)=63.84$ ,  $p<.001$ ). Both implicitly and explicitly, participants preferred a-stereotypical ads. We further found a significant interaction effect of type of advertisement and gender ( $F(1,101)=7.37$ ,  $p=.008$ ) consistent with that of Experiment 1: men’s preference for a-stereotypical pictures was less pronounced. Finally and tangential to our hypotheses, we found a significant interaction effect between measurement method and type of advertisement ( $F(1, 101)=6.82$ ,  $p=.01$ ). The preference for a-stereotypical ads was larger implicitly ( $M_{\text{z-score\_implicit}}=.72$ ) than explicitly ( $M_{\text{z-score\_explicit}}=.39$ ). We did not find a three-way interaction effect between

measurement method, type of advertisement and gender ( $F(1,101)=1.96$ ,  $p=.17$ ). Finally, the explicit and implicit difference scores did not correlate ( $r=-.02$ ,  $p=.87$ ).

#### *7.4.4. Relationships between implicit attitude and implicit stereotype measures.*

We found a significant positive correlation ( $r=.271$ ,  $p=.005$ ) between the IAT Aad and ‘potency-warmth IAT’. The ‘potency-warmth IAT’ was scored in such a way that positive scores indicated a stronger association between female names and warmth than between female names and potency. Stronger association between warmth and women (i.e. stereotyping) was related to a stronger preference for warm (i.e. a-stereotypical) ads with feminine traits. This adds to the conclusion that implicit preference for a-stereotypical ads is not related to the fact that these ads are stereotypical. Rather, the positive association suggests that stereotyping is related to a preference for warmth in general. We come back to this result in the general discussion. Similar to the results in Experiment 1, no correlation was found between the ‘career-domestic IAT’ and the Aad IAT ( $r=.14$ ,  $p=.17$ ).

#### *7.5. Discussion*

The results of the second experiment show that respondents prefer the ad with a-stereotypical portrayals of men, both explicitly and implicitly. Similar to Experiment 1, explicit attitudes seem in accordance with contemporary social norms. With respect to implicit attitudes, the findings seem to support the interpretation that the implicit Aad relies on a preference for warmth over potency rather than on a preference of stereotypical over a-stereotypical ads. Further, we did not find a correlation between the explicit and implicit attitude measures, which also suggests that both constructs stem from different sources (cf Rudman, 2004).

### **8. General discussion**

The major purpose of the current experiments was to gain more insight in the evaluation of ads containing different gender role portrayals by examining both explicit and implicit ad evaluations. The results of the self-report measures suggest a preference for more progressive ads with less stereotypical images. This preference was larger for women than for men. These two findings are in line with previous

research on gender stereotypes in advertising (Courtney & Whipple, 1983). The results of the IAT measures show a very different picture. The results indicated that men and women spontaneously prefer warmer images, irrespective of both the ad model's and the respondent's gender. This suggests that stereotypical images of women and a-stereotypical images of men were preferred to a-stereotypical images of women and stereotypical images of men and that this was the case for both men and women. We now turn to the theoretical and managerial implications of these findings.

The data of the two studies are not in line with a consistent implicit preference for either stereotypical or a-stereotypical gender role portrayals in ads. This strongly suggests that consumers do not spontaneously activate gender stereotyping during ad evaluation. The replicated null correlation between the extent to which people implicitly stereotype gender on the 'career' versus 'domestic' distinction and the extent to which they implicitly prefer stereotypical ads provides additional support for this claim. The first theoretical implication of our findings thus seems to be that automatic gender stereotyping, as demonstrated by Rudman and Kilianski (2000) and Rudman et al. (2001), cannot be extended to more complex stimuli such as advertisements. When people automatically evaluate ads, as they often do in daily life, automatic gender stereotyping does not seem to interfere with ad evaluation. Gender stereotypes that are integrated in a complex ad depicting a product, a slogan, a person, and a context might just be too complex to be processed implicitly. When the attitude-object (e.g. ads) contains more information than mere words or drawings referring to male or female stereotypes, gender stereotypicality ceases to be the most accessible categorization.

The data of the two experiments are consistent with a more fundamental dissociation between the explicit and the implicit level in the case of ad evaluations involving gender role depictions. Apparently, the categorization occurs at a more basal, primary level based on the warm-potent distinction rather than on the stereotypical-a-stereotypical distinction. In Experiment 1 respondents implicitly preferred the warm ad with a stereotypical female image to the potent ad with an a-stereotypical female image. Experiment 2, where a man was the main character in the ad, showed that the warm, but a-stereotypical ad was liked more than the potent, but stereotypical ad. This interpretation was further confirmed as, in the latter experiment, we found a positive correlation between the 'potency-warmth IAT' (women associated with warmth) and the Aad IAT (positive associated with a-stereotypical).

This suggests that the more people associate women with stimuli referring to warmth and caring and men with words referring to toughness and potency, the more these people prefer ads containing feminine, warm, positive, caring traits (i.e. a-stereotypical) to ads containing more masculine, tough, and potent traits (i.e. stereotypical).

As a limitation, we should point to the fact that this study was conducted in a relatively small and homogenous group of undergraduate students. To generalize our findings, future work should use large samples including different age categories as well as social classes. Further, current experiments can only draw conclusions on 'positive' stereotypical and a-stereotypical gender role portrayals (strong man, sensual sexy [warm] woman, strong woman and caring [warm] man) and not on negative stereotypes such as the submissive woman cleaning the house and the aggressive man. Future research could investigate how far the implicit preference for warmth extends into the more negative range of female stereotypes. A third opportunity for future research follows from the correlation between 'potency-warmth IAT' (the association between women and warmth) and Aad IAT (the association between positive and warmth). This correlation can be considered as an expansion of the greater in-group favoritism among women than among men (Rudman & Goodwin, 2004). Rudman and Goodwin found that both men and women implicitly preferred women to the extent that the respondent implicitly perceived men as more threatening than women. This may imply that respondents may prefer the ads containing female, positive, warm pictures to more masculine and potent ads because the former ads are implicitly perceived as less threatening than the latter ads. We call for future research that identifies what process (threat perception, influence from social environment,...) lies behind men and women's implicit preference for ads containing elements referring to warmth to ads containing elements that relate to potency. Another opportunity for future research is related to the role of the task relevance (Gilbert & Hixon, 1991). Gilbert and Hixon's (1991) finding that busy people are less likely to activate stereotypes when these stereotypes are not task relevant suggests another cause for the fact that implicit stereotyping does not influence implicit ad evaluations in our studies. Gender stereotypes might be irrelevant for the task at hand. Consumers might not need stereotypical gender information when engaged in processing the ad. Automatic stereotyping is 'a handy tool in the social perceiver's kit' because it saves the individual the trouble of thinking. In social interaction stereotypes enable people

to quickly understand new and unique individuals in terms of old and general beliefs (Andersen, Klatzky, and Murray 1990). It is possible that the mere exposure to ads showing different gender roles is not strong enough to make gender stereotyping interfere with ad evaluation.

The results of the current experiments have some important implications for both advertisers and marketing researchers. Given (1) the importance of automatic processes in ad evaluation, (2) that self-report measures are less appropriate to measure these processes and (3) the possible dissociation between explicit and implicit evaluation of ads depicting different gender roles, neglecting implicit ad evaluation may lead to less effective advertising strategies. Based on our data we invite advertisers and market researcher to broaden standard copy testing by including implicit measures of evaluation. Further, with respect to the debate on gender role portrayals in ads, implicit ad evaluation in our studies suggests that women, but not men, could be depicted stereotypically to the extent that warm images are used. However, keeping the explicit ad evaluation in mind that respondents generally prefer a-stereotypical images (and women even more than men), we recommend advertisers to gear female stereotype usage to the type of ad. For instance, ads praising high involvement products containing information on objective product benefits (e.g. high tech products, cars, etc.) should preferably avoid stereotypical gender role portrayals. That is because consumers highly involved with a product are motivated to process ads recommending that product deliberately (cf ELM, Petty & Cacioppo, 1986). However, our results suggest that consumers processing ads deliberately disapprove the endorsement of stereotypes in ads. On the other hand, ads praising low-involvement products and therefore likely to be processed spontaneously may benefit from warm stereotypical female role portrayals. In sum, we conclude that advertisers should not only mind the ad's stereotypicality but also its warmth.

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